

09/992,235

(FILE 'HOME' ENTERED AT 19:44:44 ON 18 MAR 2002)

FILE 'REGISTRY' ENTERED AT 19:44:51 ON 18 MAR 2002  
E AMPHETAMINIL/CN

L1 2 S E3-E4

FILE 'CAPLUS, USPATFULL' ENTERED AT 20:01:52 ON 18 MAR 2002  
2 S L1 AND (ENANTIOMER? OR ISOMER? OR R,R(2A)R,S)

L2

FILE 'REGISTRY' ENTERED AT 20:05:06 ON 18 MAR 2002  
E METHYLPHENIDATE/CN

L3 1 S E3

FILE 'CAPLUS, USPATFULL' ENTERED AT 20:05:57 ON 18 MAR 2002  
4 S L1 AND (ATTENTION(2A)DEFICIT(2A)DISORDER# OR ADHD OR NARCOLEP  
4 DUP REM L4 (0 DUPLICATES REMOVED)

L4

L5

=>

09/992,235

=> d his

(FILE 'HOME' ENTERED AT 19:44:44 ON 18 MAR 2002)

FILE 'REGISTRY' ENTERED AT 19:44:51 ON 18 MAR 2002

E AMPHETAMINIL/CN

L1 2 S E3-E4

FILE 'CAPLUS, USPATFULL' ENTERED AT 20:01:52 ON 18 MAR 2002

=> s l1 and (enantiomer? or isomer? or R,R(2a)R,S)

L2 2 L1 AND (ENANTIOMER? OR ISOMER? OR R,R(2A) R,S)

=> d l2 abs ibib kwic hitrn 1 2

L2 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS

AB Reversed-phase HPLC and UV detection (254 nm) were used in expts. to sep. the **enantiomers** of a no. of title compds. after derivatization. Five .beta.-adrenergic antagonists (propranolol, pindolol, talinolol, atenolol, and metipranolol) and 2 .alpha.-sympathomimetics (methylphenidate and propylhexidine) could be **enantiomerically** sepd. after derivatization with (R)-(-)-(naphth-1-yl)ethyl isocyanate (I). For 2 of these compds. (propranolol and propylhexidine), the sepn. was also achieved after derivatization with (R)-(+)-1-phenylethyl isocyanate (II). The **enantiomers** of norphenylephedrine could be sepd. after reaction with (1S)-(+)-camphor-10-sulfonyl chloride (III). Compds. which could be derivatized with I and II gave no reaction with III, and vice versa.

ACCESSION NUMBER: 1992:262611 CAPLUS

DOCUMENT NUMBER: 116:262611

TITLE: Separation of some racemic .beta.-adrenergic blocking agents and .alpha.-sympathomimetics by HPLC after derivatization

AUTHOR(S): Jira, T.; Toll, C.; Vogt, Christiane; Beyrich, T.

CORPORATE SOURCE: Fachbereich Pharm., Ernst-Moritz-Arndt-Univ., Greifswald, O-2200, Germany

SOURCE: Pharmazie (1991), 46(6), 432-4

CODEN: PHARAT; ISSN: 0031-7144

DOCUMENT TYPE: Journal

LANGUAGE: German

AB Reversed-phase HPLC and UV detection (254 nm) were used in expts. to sep. the **enantiomers** of a no. of title compds. after derivatization. Five .beta.-adrenergic antagonists (propranolol, pindolol, talinolol, atenolol, and metipranolol) and 2 .alpha.-sympathomimetics (methylphenidate and propylhexidine) could be **enantiomerically** sepd. after derivatization with (R)-(-)-(naphth-1-yl)ethyl isocyanate (I). For 2 of these compds. (propranolol and propylhexidine), the sepn. was also achieved after derivatization with (R)-(+)-1-phenylethyl isocyanate (II). The **enantiomers** of norphenylephedrine could be sepd. after reaction with (1S)-(+)-camphor-10-sulfonyl chloride (III). Compds. which could be derivatized with I and II.

ST adrenergic agonist antagonist **enantiomer** derivatization HPLC;

liq chromatog adrenergic agonist antagonist **enantiomer**

IT 51-55-8, analysis 90-81-3 94-27-9, Racemic bamethane 113-45-1  
149-53-1, Racemic isoprenaline 300-62-9, Racemic amphetamine 618-36-0,  
Racemic phenylethylamine 3595-11-7 10128-36-6, Racemic etilefrine  
13013-17-7, Racemic propranolol 17590-01-1 21071-51-2

09/992,235

21870-06-4 29493-75-2 46116-61-4, Racemic pholedrine 52849-55-5  
54680-46-5, Racemic norpseudoephedrine 57460-41-0, Racemic talinolol  
60966-51-0 104970-08-3 141782-89-0

RL: ANST (Analytical study)

(resoln. of, by HPLC after derivatization with chiral isocyanates)

IT 17590-01-1

RL: PROC (Process)

(resoln. of, by HPLC after derivatization with chiral isocyanates)

L2 ANSWER 2 OF 2 USPATFULL

AB Novel pharmaceutical dosage forms provide for pulsatile delivery of d-threo-methylphenidate and a second CNS stimulant, i.e., release encapsulated drug in spaced apart "pulses." The second CNS stimulant may be an analeptic agent or a psychostimulant, with analeptic agents preferred. The dosage forms may comprise capsules housing compressed tablets or drug-containing beads or particles, or may comprise a tablet with the first, second and optionally third dosage units each representing an integral and discrete segment thereof. Methods of treatment using the pharmaceutical dosage forms are provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:55482 USPATFULL

TITLE: Pharmaceutical dosage form for pulsatile delivery of d-threo-methylphenidate and a second CNS stimulant

INVENTOR(S): Midha, Kamal K., Hamilton, Bermuda  
Teicher, Martin H., Waltham, MA, United States

PATENT ASSIGNEE(S): Pharmaquest Ltd., Hamilton, Bermuda (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6217904	B1	20010417
APPLICATION INFO.:	US 2000-544382		20000406 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-127984	19990406 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Page, Thurman K.	
ASSISTANT EXAMINER:	Bennett, Rachel M	
LEGAL REPRESENTATIVE:	Reed, Dianne E. Reed & Associates	
NUMBER OF CLAIMS:	38	
EXEMPLARY CLAIM:	1	
LINE COUNT:	906	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . well as for mood elevation, particularly in terminally ill patients with diseases such as cancer. Methylphenidate exists as four distinct **isomers**, as follows: ##STR1##

SUMM The drug as used in therapy is a racemic mixture of the d- and l-threo **enantiomers**, which have been acknowledged as more active than the erythro pair.

SUMM It has recently been found that the d-threo **enantiomer** of methylphenidate, rather than the l-threo **enantiomer**, is primarily responsible for the therapeutic effectiveness of methylphenidate, particularly in ADHD. See Srinivas et al. (1992), "Enantioselective Pharmacokinetics and. . . and l-threo methylphenidate to children suffering from ADHD, and determined that the

pharmacodynamic activity of methylphenidate resides in the d-threo isomer. Ding et al. (1997), "Chiral Drugs: Comparison of the Pharmacokinetics of [sup.11 C]d-threo and l-threo-Methylphenidate in the Human and Baboon. . . threo Methylphenidate in Rats," Pharmacology Biochemistry & Behavior 40:875-880, also studied the relative therapeutic efficacy of the d-threo and l-threo isomers, concluding that d-threo-methylphenidate was responsible for the therapeutic efficacy of the racemate.

SUMM . . . of tolerance to the drug, and potential for abuse. Accordingly, several researchers have proposed administering methylphenidate as the pure d-threo isomer rather than as the racemic mixture of d-threo and l-threo isomers. See, e.g., U.S. Pat. No. 5,908,850 to Zeitlin et al., U.S. Pat. No. 5,874,090 to Baker et al., and U.S. . . .

IT 51-63-8 51-64-9 54-95-5, Pentylenetetrazole 57-11-4, Stearic acid, biological studies 59-26-7, Niketamide 60-13-9, Amphetamine sulfate 63-42-3, Lactose 64-65-3, Bemegride 69-65-8, D-Mannitol 90-81-3, Racephedrine 90-84-6, Diethpropion 122-09-8, Phentermine 124-87-8, Picrotoxin 134-49-6, Phenmetrazine 156-08-1, Benzphetamine 300-62-9, Amphetamine 304-84-7, Ethamivan 309-29-5, Doxapram 333-36-8, Flurothyl 341-00-4, Etifelmin 357-57-3, Brucine 457-87-4, N-Ethylamphetamine 458-24-2, Fenfluramine 461-78-9, Chlorphentermine 467-60-7, Pipradrol 493-92-5, Prolintane 537-46-2, Methamphetamine 557-04-0, Magnesium stearate 634-03-7, Phendimetrazine 1200-47-1, Amphetamine phosphate 1209-98-9, Fencamfamine 1227-61-8, Mefexamide 1344-28-1, Alumina, biological studies 1462-73-3 1592-23-0, Calcium stearate 2152-34-3, Pemoline 2235-90-7, Etryptamine 2706-50-5, Amphetamine hydrochloride 3563-49-3, Pyrovalerone 3635-74-3, Deanol acetamidobenzoate 3736-08-1, Fenethylline 4741-41-7, Dexoxadrol 5632-52-0, Clofenciclan 6909-62-2, Demanyl phosphate 7491-42-1, Hexacyclonate 7528-00-9 7631-86-9, Silica, biological studies 7778-18-9, Calcium sulfate 7789-77-7, Dicalcium phosphate dihydrate 9004-34-6, Cellulose, biological studies 9005-25-8, Starch, biological studies 9063-38-1, Sodium starch glycolate 10389-73-8, Clortermine 13463-67-7, Titania, biological studies 14807-96-6, Talc, biological studies 15302-16-6, Fenozolone 17590-01-1, Amphetaminil 18641-57-1, Glyceryl behenate 22232-71-9, Mazindol 25322-68-3, Peg 25333-81-7, Amphetamine aspartate 28587-71-5, Homocamfin 300666-46-0 300666-47-1 300666-48-2

(pulsatile release pharmaceuticals for delivery of methylphenidate)

IT 17590-01-1, Amphetaminil

(pulsatile release pharmaceuticals for delivery of methylphenidate)

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=> d his

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L1 2 S E3-E4

FILE 'CAPLUS, USPATFULL' ENTERED AT 20:01:52 ON 18 MAR 2002

L2 2 S L1 AND (ENANTIOMER? OR ISOMER? OR R,R(2A)R,S)

FILE 'REGISTRY' ENTERED AT 20:05:06 ON 18 MAR 2002

E METHYLPHENIDATE/CN

L3 1 S E3

FILE 'CAPLUS, USPATFULL' ENTERED AT 20:05:57 ON 18 MAR 2002

=> s l1 and (attention(2a)deficit(2a)disorder# or adhd or narcolep? or parkinson?  
or depression or alzheimer?)

L4 4 L1 AND (ATTENTION(2A) DEFICIT(2A) DISORDER# OR ADHD OR NARCOLEP?  
OR PARKINSON? OR DEPRESSION OR ALZHEIMER?)

=> dup rem l4

PROCESSING COMPLETED FOR L4

L5 4 DUP REM L4 (0 DUPLICATES REMOVED)

=> d l5 abs ibib kwic 1-4

L5 ANSWER 1 OF 4 USPATFULL

AB A transdermal composition is disclosed which contains a blend of one or more polymers, one or more drugs, at least one of which has a low molecular weight and is liquid at or about room temperatures. The composition is substantially free of water and liquids which have a normal boiling point (a) optionally below processing temperatures and (b) greater than or equal to the temperature of the low molecular weight drugs. The composition does not suffer from the substantial loss of the lower molecular weight drug during production of the transdermal system. A transdermal composition is also disclosed which has one or more drugs, at least one of which has a low molecular weight and is liquid at or about room temperatures, and a polymer matrix including one or more high shear resistant polymers. The high shear resistant polymer(s) reduce the plasticizing effect of the low molecular weight drug, and has sufficient tack and shear for application to a human being.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:202218 USPATFULL

TITLE: Transdermal compositions containing low molecular weight drugs which are liquid at room temperatures

INVENTOR(S): Mantelle, Juan, Miami, FL, United States

Houze, David, Coconut Grove, FL, United States

PATENT ASSIGNEE(S): Noven Pharmaceuticals, Inc., Miami, FL, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6316022	B1	20011113
APPLICATION INFO.:	US 1995-578308		19951226 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-472759, filed on 7 Jun 1995, now abandoned  
DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Dodson, Shelley A.  
LEGAL REPRESENTATIVE: Foley & Lardner  
NUMBER OF CLAIMS: 26  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)  
LINE COUNT: 968  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . or other animals is well known in the art. For example, WO 91/185592 describes the use of selegiline for treating **Parkinson**'s disease and increasing the life-expectancy of human beings. U.S. Pat. No. 5,192,808 describes the use of selegiline in the treatment. . .

SUMM . . . European patent application 509,761 and PCT WO 89/09051 describe the use of transdermal compositions containing selegiline for the treatment of **Parkinson's** disease. WO 92/21333 describes the use of a transdermal composition containing selegiline for treating withdrawal symptoms and reducing the craving. . . no. 473,252 and Canadian patent application no. 2,022,552 describe the use of selegiline in transdermal compositions for the treatment of **Parkinson's** disease. U.S. Pat. No. 5,242,950 describes the use of a transdermal patch containing selegiline for macular degeneration. U.S. Pat. No. 4,868,218 describes the transdermal application of selegiline in the treatment of **depression**. Nicotine and nitroglycerine are drugs, normally liquid at or about room temperatures, for which there is considerable art on transdermal. . .

IT 54-11-5, Nicotine 55-63-0, Nitroglycerin 63-75-2, Arecolin 77-67-8, Ethosuximide 99-66-1, Valproic acid 525-66-6, Propranolol 536-43-6 537-46-2, Methamphetamine 721-50-6, Prilocaine 14556-46-8, Bupranolol 14611-51-9, Selegiline **17590-01-1**, Amphetaminil 41621-49-2, Ciclopirox olamine 75626-99-2, Tobuterol 162731-15-9, Duro-Tak 87-2852  
(transdermal compns. contg. low mol. wt. drugs which are liq. at room temps.)

L5 ANSWER 2 OF 4 USPATFULL

AB Novel pharmaceutical dosage forms provide for pulsatile delivery of d-threo-methylphenidate and a second CNS stimulant, i.e., release encapsulated drug in spaced apart "pulses." The second CNS stimulant may be an analeptic agent or a psychostimulant, with analeptic agents preferred. The dosage forms may comprise capsules housing compressed tablets or drug-containing beads or particles, or may comprise a tablet with the first, second and optionally third dosage units each representing an integral and discrete segment thereof. Methods of treatment using the pharmaceutical dosage forms are provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:55482 USPATFULL  
TITLE: Pharmaceutical dosage form for pulsatile delivery of d-threo-methylphenidate and a second CNS stimulant  
INVENTOR(S): Midha, Kamal K., Hamilton, Bermuda  
Teicher, Martin H., Waltham, MA, United States  
PATENT ASSIGNEE(S): Pharmaquest Ltd., Hamilton, Bermuda (non-U.S. corporation)

NUMBER KIND DATE

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	NUMBER	DATE
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FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Page, Thurman K.	
ASSISTANT EXAMINER:	Bennett, Rachel M	
LEGAL REPRESENTATIVE:	Reed, Dianne E. Reed & Associates	
NUMBER OF CLAIMS:	38	
EXEMPLARY CLAIM:	1	
LINE COUNT:	906	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . acid methyl ester (available commercially as Ritalin.RTM.), is a central nervous system stimulant that is used in the treatment of **Attention Deficit Disorder** ("ADD"), a commonly diagnosed nervous system illness in children that is characterized by both distractability and impulsivity. Methylphenidate HCl is also used to treat a related **disorder**, **Attention Deficit Hyperactivity Disorder** ("ADHD"), in which symptoms of hyperactivity are present along with the symptoms of ADD. The drug is additionally used in the symptomatic treatment of **narcolepsy**, **depression**, and the cognitive decline associated with Acquired Immunodeficiency Syndrome ("AIDS") or AIDS-related conditions, as well as for mood elevation, particularly.

SUMM . . . d-threo enantiomer of methylphenidate, rather than the l-threo enantiomer, is primarily responsible for the therapeutic effectiveness of methylphenidate, particularly in **ADHD**. See Srinivas et al. (1992), "Enantioselective Pharmacokinetics and Pharmacodynamics of d,l-threo-Methylphenidate in Children with **Attention Deficit Hyperactivity Disorder**," Clin. Pharmacol. Ther. 52:561-568, who compared the results of administering dl-threo, d-threo, and l-threo methylphenidate to children suffering from **ADHD**, and determined that the pharmacodynamic activity of methylphenidate resides in the d-threo isomer. Ding et al. (1997), "Chiral Drugs: Comparison. . .

SUMM . . . to a second central nervous system ("CNS") stimulant (e.g., an analeptic agent such as d-amphetamine, as found in the commercial **ADHD** product Adderol.RTM.). It has now been discovered that co-administering methylphenidate, and particularly d-threo methylphenidate, with a second CNS stimulant, particularly.

SUMM . . . any disorder, condition or disease for which methylphenidate is generally indicated. Such disorders, conditions and diseases include, for example, ADD, **ADHD**, **narcolepsy**, and acute **depression**; methylphenidate may also be used in the treatment of individuals suffering from cognitive decline associated with AIDS or AIDS-related conditions, . . .

CLM What is claimed is:  
34. A method for treating an individual suffering from **ADHD**, comprising administering to the individual, once daily, the dosage form of claim 1.

35. A method for treating an individual suffering from **narcolepsy**, comprising administering to the individual, once

daily, the dosage form of claim 1.

36. A method for treating an individual suffering from acute depression, comprising administering to the individual, once daily, the dosage form of claim 1.

IT 51-63-8 51-64-9 54-95-5, Pentylenetetrazole 57-11-4, Stearic acid, biological studies 59-26-7, Niketamide 60-13-9, Amphetamine sulfate 63-42-3, Lactose 64-65-3, Bemegride 69-65-8, D-Mannitol 90-81-3, Racephedrine 90-84-6, Diethpropion 122-09-8, Phentermine 124-87-8, Picrotoxin 134-49-6, Phenmetrazine 156-08-1, Benzphetamine 300-62-9, Amphetamine 304-84-7, Ethamivan 309-29-5, Doxapram 333-36-8, Flurothyl 341-00-4, Etifelmin 357-57-3, Brucine 457-87-4, N-Ethylamphetamine 458-24-2, Fenfluramine 461-78-9, Chlorphentermine 467-60-7, Pipradrol 493-92-5, Prolintane 537-46-2, Methamphetamine 557-04-0, Magnesium stearate 634-03-7, Phendimetrazine 1200-47-1, Amphetamine phosphate 1209-98-9, Fencamfamine 1227-61-8, Mefexamide 1344-28-1, Alumina, biological studies 1462-73-3 1592-23-0, Calcium stearate 2152-34-3, Pemoline 2235-90-7, Etryptamine 2706-50-5, Amphetamine hydrochloride 3563-49-3, Pyrovalerone 3635-74-3, Deanol acetamidobenzoate 3736-08-1, Fenethylline 4741-41-7, Dexoadrol 5632-52-0, Clofenciclan 6909-62-2, Demanyl phosphate 7491-42-1, Hexacyclonate 7528-00-9 7631-86-9, Silica, biological studies 7778-18-9, Calcium sulfate 7789-77-7, Dicalcium phosphate dihydrate 9004-34-6, Cellulose, biological studies 9005-25-8, Starch, biological studies 9063-38-1, Sodium starch glycolate 10389-73-8, Clortermine 13463-67-7, Titania, biological studies 14807-96-6, Talc, biological studies 15302-16-6, Fenozolone 17590-01-1, Amphetaminil 18641-57-1, Glyceryl behenate 22232-71-9, Mazindol 25322-68-3, Peg 25333-81-7, Amphetamine aspartate 28587-71-5, Homocamfin 300666-46-0 300666-47-1 300666-48-2  
(pulsatile release pharmaceuticals for delivery of methylphenidate)

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS

AB Novel pharmaceutical dosage forms provide for pulsatile delivery of d-threo-methylphenidate (I) and a second CNS stimulant, i.e., release encapsulated drug in spaced apart "pulses". The second CNS stimulant may be an analeptic agent or a psychostimulant, with analeptic agents preferred. The dosage forms may comprise capsules housing compressed tablets or drug-contg. beads or particles, or may comprise a tablet with the first, second and optionally third dosage units each representing an integral and discrete segment thereof. Methods of treatment using the pharmaceutical dosage forms are provided as well. A pulsatile release dosage for for administration of I and d-amphetamine is prepd. by formulating 3 individual compressed tablets, each having a different release profile, followed by encapsulating the 3 tablets into a gelatin capsule and then closing and sealing the capsule.

ACCESSION NUMBER: 2000:725442 CAPLUS  
DOCUMENT NUMBER: 133:301177  
TITLE: Pharmaceutical dosage form for pulsatile delivery of d-threo-methylphenidate and a second CNS stimulant  
INVENTOR(S): Midha, Kamal K.; Teicher, Martin  
PATENT ASSIGNEE(S): Pharmaquest Ltd., Bermuda  
SOURCE: PCT Int. Appl., 27 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2



## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000059481	A1	20001012	WO 2000-US9472	20000406
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6217904	B1	20010417	US 2000-544382	20000406
US 6340476	B1	20020122	US 2000-544732	20000406
PRIORITY APPLN. INFO.:			US 1999-127984P	P 19990406
REFERENCE COUNT:		2	THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT	
IT	Mental disorder (attention deficit disorder; pharmaceutical dosage form for pulsatile delivery of d-threo-methylphenidate and a second CNS stimulant)			
IT	51-64-9 54-95-5, Pentylenetetrazole 57-11-4, Stearic acid, biological studies 59-26-7, Nikethamide 63-42-3, Lactose 64-65-3, Bemegride 69-65-8, D-Mannitol 90-81-3, Racephedrine 90-84-6, Diethpropion 122-09-8, Phentermine 124-87-8, Picrotoxin 134-49-6, Phenmetrazine 156-08-1, Benzphetamine 300-62-9, Amphetamine 304-84-7, Ethamivan 309-29-5, Doxapram 333-36-8, Flurothyl 341-00-4, Etifelmin 357-57-3, Brucine 457-87-4, N-Ethylamphetamine 458-24-2, Fenfluramine 461-78-9, Chlorphentermine 467-60-7, Pipradrol 493-92-5, Prolintane 537-46-2, Methamphetamine 557-04-0, Magnesium stearate 634-03-7, Phendimetrazine 1200-47-1, Amphetamine phosphate 1209-98-9, Fencamfamine 1227-61-8, Mefexamide 1344-28-1, Alumina, biological studies 1462-73-3 1592-23-0, Calcium stearate 2152-34-3, Pemoline 2235-90-7, Etryptamine 2706-50-5, Amphetamine hydrochloride 3563-49-3, Pyrovalerone 3635-74-3, Deanol acetamidobenzoate 3736-08-1, Fenethylline 4741-41-7, Dexoxadrol 5632-52-0, Clofenciclan 6909-62-2, Demanyl phosphate 7491-42-1, Hexacyclonate 7528-00-9 7631-86-9, Silica, biological studies 7778-18-9, Calcium sulfate 7789-77-7, Dicalcium phosphate dihydrate 9004-34-6, Cellulose, biological studies 9005-25-8, Starch, biological studies 9063-38-1, Sodium starch glycolate 10389-73-8, Clortermine 13463-67-7, Titania, biological studies 14807-96-6, Talc, biological studies 15302-16-6, Fenozolone 17590-01-1, Amphetaminil 18641-57-1, Glyceryl behenate 22232-71-9, Mazindol 25322-68-3, Peg 25333-81-7, Amphetamine aspartate 28587-71-5, Homocamfin 300666-46-0 300666-47-1 300666-48-2			
	RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical dosage form for pulsatile delivery of d-threo-methylphenidate and a second CNS stimulant)			
L5	ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS			
AB	Novel pharmaceutical dosage forms provide for pulsatile delivery of methylphenidate, i.e., release encapsulated drug in spaced apart "pulses". The dosage forms are comprised of first, second and optionally third dosage units, with each dosage unit having a different drug release			

profile. The dosage forms may comprise capsules housing compressed tablets or drug-contg. beads or particles, or may comprise a single tablet with the first, second and optionally third dosage units each representing an integral and discrete segment thereof. Methods of treatment using the pharmaceutical dosage forms are provided as well. A pulsatile release dosage form for administration of dl-threo-methylphenidate is prepd. by formulating 3 individual compressed tablets, each having a different release profile, followed by encapsulating the 3 tablets into a gelatin capsule and then closing and sealing the capsule.

ACCESSION NUMBER: 2000:725440 CAPLUS  
 DOCUMENT NUMBER: 133:301175  
 TITLE: Pharmaceutical dosage form for pulsatile delivery of methylphenidate  
 INVENTOR(S): Midha, Kamal K.; Iorio, Theodore L.; Chungi, Shubha  
 PATENT ASSIGNEE(S): Pharmaquest Ltd., Bermuda  
 SOURCE: PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000059479	A1	20001012	WO 2000-US9359	20000406
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6217904	B1	20010417	US 2000-544382	20000406
EP 1165054	A1	20020102	EP 2000-923181	20000406
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6340476	B1	20020122	US 2000-544732	20000406
PRIORITY APPLN. INFO.: US 1999-127984P P 19990406				
WO 2000-US9359 W 20000406				

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Mental disorder

(attention deficit disorder; pulsatile release pharmaceuticals for delivery of methylphenidate)

IT 51-63-8 51-64-9 54-95-5, Pentylenetetrazole 57-11-4, Stearic acid, biological studies 59-26-7, Niketamide 60-13-9, Amphetamine sulfate 63-42-3, Lactose 64-65-3, Bemegride 69-65-8, D-Mannitol 90-81-3, Racephedrine 90-84-6, Diethpropion 122-09-8, Phentermine 124-87-8, PicROTOXIN 134-49-6, Phenmetrazine 156-08-1, Benzphetamine 300-62-9, Amphetamine 304-84-7, Ethamivan 309-29-5, Doxapram 333-36-8, Flurothyl 341-00-4, Etifelmin 357-57-3, Brucine 457-87-4, N-Ethylamphetamine 458-24-2, Fenfluramine 461-78-9, Chlorphentermine 467-60-7, Pipradrol 493-92-5, Prolintane 537-46-2, Methamphetamine 557-04-0, Magnesium stearate 634-03-7, Phendimetrazine 1200-47-1, Amphetamine phosphate 1209-98-9, Fencamfamine 1227-61-8, Mefexamide 1344-28-1, Alumina, biological studies 1462-73-3 1592-23-0, Calcium

09/992,235

stearate 2152-34-3, Pemoline 2235-90-7, Etryptamine 2706-50-5,  
Amphetamine hydrochloride 3563-49-3, Pyrovalerone 3635-74-3, Deanol  
acetamidobenzoate 3736-08-1, Fenethylline 4741-41-7, Dexoxadrol  
5632-52-0, Clofenciclan 6909-62-2, Demanyl phosphate 7491-42-1,  
Hexacyclonate 7528-00-9 7631-86-9, Silica, biological studies  
7778-18-9, Calcium sulfate 7789-77-7, Dicalcium phosphate dihydrate  
9004-34-6, Cellulose, biological studies 9005-25-8, Starch, biological  
studies 9063-38-1, Sodium starch glycolate 10389-73-8, Clortermine  
13463-67-7, Titania, biological studies 14807-96-6, Talc, biological  
studies 15302-16-6, Fenozolone 17590-01-1, Amphetaminil  
18641-57-1, Glyceryl behenate 22232-71-9, Mazindol 25322-68-3, Peg  
25333-81-7, Amphetamine aspartate 28587-71-5, Homocamfin 300666-46-0  
300666-47-1 300666-48-2

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)

(pulsatile release pharmaceuticals for delivery of methylphenidate)

=> d his

(FILE 'HOME' ENTERED AT 19:44:44 ON 18 MAR 2002)

FILE 'REGISTRY' ENTERED AT 19:44:51 ON 18 MAR 2002  
E AMPHETAMINIL/CN

L1 2 S E3-E4

FILE 'CAPLUS, USPATFULL' ENTERED AT 20:01:52 ON 18 MAR 2002  
2 S L1 AND (ENANTIOMER? OR ISOMER? OR R,R(2A)R,S)

L2

FILE 'REGISTRY' ENTERED AT 20:05:06 ON 18 MAR 2002  
E METHYLPHENIDATE/CN

L3 1 S E3

FILE 'CAPLUS, USPATFULL' ENTERED AT 20:05:57 ON 18 MAR 2002

L4 4 S L1 AND (ATTENTION(2A)DEFICIT(2A)DISORDER# OR ADHD OR NARCOLEP

L5 4 DUP REM L4 (0 DUPLICATES REMOVED)

=>

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=> e amphetaminil/cn

E1 1 AMPHETAMINE, .BETA.-METHYL-/CN  
E2 1 AMPHETAMINE-METHYL-D3/CN  
E3 1 --> AMPHETAMINIL/CN  
E4 1 AMPHETAMINIL HYDROCHLORIDE/CN  
E5 1 AMPHETAMINOETHYLTHEOPHYLLINE/CN  
E6 1 AMPHETHINILE/CN  
E7 1 AMPHEX/CN  
E8 1 AMPHI-CHLOROGLYOXIME/CN  
E9 1 AMPHI-PHENYLGLYOXIME/CN  
E10 1 AMPHIACRIC ACID A/CN  
E11 1 AMPHIACRIC ACID B/CN  
E12 1 AMPHIACROLIDE A/CN

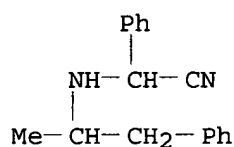
=> s e3-e4

1 AMPHETAMINIL/CN  
1 "AMPHETAMINIL HYDROCHLORIDE"/CN  
L1 2 (AMPHETAMINIL/CN OR "AMPHETAMINIL HYDROCHLORIDE"/CN)

=>

=> d l1 1 2

L1 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS  
RN 58470-01-2 REGISTRY  
CN Benzeneacetonitrile, .alpha.-[(1-methyl-2-phenylethyl)amino]-,  
monohydrochloride (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glycinonitrile, N-(.alpha.-methylphenethyl)-2-phenyl-, hydrochloride (7CI)  
OTHER NAMES:  
CN **Amphetaminil hydrochloride**  
MF C17 H18 N2 . Cl H  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS  
(\*File contains numerically searchable property data)  
CRN (17590-01-1)



● HCl

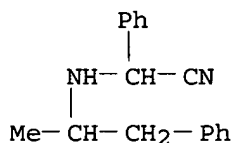
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L1 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2002 ACS  
RN 17590-01-1 REGISTRY  
CN Benzeneacetonitrile, .alpha.-[(1-methyl-2-phenylethyl)amino]- (9CI) (CA  
INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Acetonitrile, [(.alpha.-methylphenethyl)amino]phenyl- (8CI)

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CN Glycinonitrile, N-(.alpha.-methylphenethyl)-2-phenyl- (7CI)  
OTHER NAMES:  
CN .alpha.-Phenyl-.alpha.-(1-phenylisopropyl)aminoacetonitrile  
CN .alpha.-Phenyl-.alpha.-N-(1-phenylisopropyl)aminoacetonitrile  
CN .alpha.-Phenyl-.alpha.-[N-(.beta.-phenylisopropyl)amino]acetonitrile  
CN Amfetaminil  
CN **Amphetaminil**  
CN AN 1  
CN AN 1 (pharmaceutical)  
CN Aponeuron  
CN dl-Amphetaminil  
CN N-(.beta.-Phenylisopropyl)-.alpha.-aminophenylacetonitrile  
FS 3D CONCORD  
MF C17 H18 N2  
CI COM  
LC STN Files: ANABSTR, BEILSTEIN\*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS,  
CASREACT, CHEMLIST, DDFU, DRUGU, EMBASE, IPA, MEDLINE, MRCK\*, RTECS\*,  
SPECINFO, TOXCENTER, USAN, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*, WHO  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

72 REFERENCES IN FILE CA (1967 TO DATE)  
72 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus, uspatfull

09/992,235

=> s amphetaminil

L9 54 AMPHETAMINIL

=> s l9 and (attention(2a)deficit(2a)disorder# or adhd or narcolep? or parkinson?  
or depression or alzheimer?)

L10 11 L9 AND (ATTENTION(2A) DEFICIT(2A) DISORDER# OR ADHD OR NARCOLEP  
? OR PARKINSON? OR DEPRESSION OR ALZHEIMER?)

=> dup rem l10

PROCESSING COMPLETED FOR L10

L11 11 DUP REM L10 (0 DUPLICATES REMOVED)

=> d l11 abs ibib kwic 1-11

L11 ANSWER 1 OF 11 USPATFULL

AB Compositions and methods for the transdermal delivery of active agents  
up to a period of seven days or more at substantially a zero-order  
release rate comprising a pharmaceutically acceptable adhesive matrix  
and a polymeric plastic material that provides a release rate regulating  
effect on the active agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:8068 USPATFULL

TITLE: Compositions and methods to effect the release profile  
in the transdermal administration of active agents

INVENTOR(S): Kanios, David, Miami, FL, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002004065	A1	20020110
APPLICATION INFO.:	US 2001-765932	A1	20010119 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-177103	20000120 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Noven Pharmaceuticals, Inc., 11960 S.W. 144th Street, Miami, FL, 33186	
NUMBER OF CLAIMS:	14	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Page(s)	
LINE COUNT:	2059	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD [0269] 86. Central nervous system stimulants and agents such as  
Amineptine, Amphetimine, **Amphetaminil**, Bemegride,  
Benzphetamine, Brucine, Caffeine, Chlorphentermine, Clofenciclan,  
Clortermine, Coca, Demanyl Phosphate, Dexoxadrol, Dextroamphetamine  
Sulfate, Diethylpropion, N-Ethylamphetamine, Ethamivan, Etifelmin,  
Etryptamine, Fencamfamine, Fenethylline, . . .

CLM What is claimed is:

. . . and hormonal agents, analgesics and anti-migraine agents,  
anesthetics, anti-inflammatory and corticoid agents, central nervous  
system stimulants and agents, cardioactive agents, anti-  
**Parkinson's** and anti-**Alzheimer's** agents,  
anti-psychotic agents, anti-anxiety agents, anti-depressants, anxiolytic  
agents, sedatives, hypnotics, anti-microbial agents, and anti-cancer

agents.

## L11 ANSWER 2 OF 11 USPATFULL

AB Novel pharmaceutical dosage forms provide for pulsatile delivery of methylphenidate, i.e., release encapsulated drug in spaced apart "pulses." The dosage forms are comprised of first, second and optionally third dosage units, with each dosage unit having a different drug release profile. The dosage forms may comprise capsules housing compressed tablets or drug-containing beads or particles, or may comprise a single tablet with the first, second and optionally third dosage units each representing an integral and discrete segment thereof. Methods of treatment using the pharmaceutical dosage forms are provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:13804 USPATFULL  
 TITLE: Pharmaceutical dosage form for pulsatile delivery of methylphenidate  
 INVENTOR(S): Midha, Kamal K., Hamilton, BERMUDA  
 Iorio, Theodore L., Millis, MA, United States  
 Chungi, Shubha, Sharon, MA, United States  
 PATENT ASSIGNEE(S): Armaquest, Inc., Hamilton, BERMUDA (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6340476	B1	20020122
APPLICATION INFO.:	US 2000-544732		20000406 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-127984	19990406 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Page, Thurman K.	
ASSISTANT EXAMINER:	Di Nola-Baron, Lillian	
LEGAL REPRESENTATIVE:	Reed, Dianne E., Reed & Associates	
NUMBER OF CLAIMS:	56	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)	
LINE COUNT:	838	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . acid methyl ester (available commercially as Ritalin.RTM.), is a central nervous system stimulant that is used in the treatment of **Attention Deficit Disorder** ("ADD"), a commonly diagnosed nervous system illness in children that is characterized by both distractability and impulsivity. Methylphenidate HCl is also used to treat a related **disorder**, **Attention Deficit Hyperactivity Disorder** ("ADHD"), in which symptoms of hyperactivity are present along with the symptoms of ADD. The drug is additionally used in the symptomatic treatment of **narcolepsy**, **depression**, and the cognitive decline associated with Acquired Immunodeficiency Syndrome ("AIDS") or AIDS-related conditions, as well as for mood elevation, particularly.

SUMM . . . and d-amphetamine phosphate, amphetamine and d-amphetamine sulfate, amphetamine and d-amphetamine hydrochloride, amphetamine and

d-amphetamine saccharate, and amphetamine and d-amphetamine aspartate, amphetaminil, bemegride, benzphetamine, benzphetamine hydrochloride, brucine, chlorphentermine, clofenciclan, clortermine, deanol acetamidobenzoate, demanyl phosphate, dexoxadrol, diethpropion, doxapram hydrochloride, N-ethylamphetamine, ethamivan, etifelmin, etryptamine, . . .

SUMM . . . any disorder, condition or disease for which methylphenidate is generally indicated. Such disorders, conditions and diseases include, for example, ADD, **ADHD**, **narcolepsy**, and acute **depression**; methylphenidate may also be used in the treatment of individuals suffering from cognitive decline associated with AIDS or AIDS-related conditions, . . .

CLM What is claimed is:  
31. A method for treating an individual suffering from **ADHD**, comprising administering to the individual, once daily, the dosage form of claim 1.

32. A method for treating an individual suffering from **narcolepsy**, comprising administering to the individual, once daily, the dosage form of claim 1.

33. A method for treating an individual suffering from acute **depression**, comprising administering to the individual, once daily, the dosage form of claim 1.

50. A method for treating an individual suffering from **ADHD**, comprising administering to the individual, once daily, the dosage form of claim 36.

51. A method for treating an individual suffering from **narcolepsy**, comprising administering to the individual, once daily, the dosage form of claim 36.

52. A method for treating an individual suffering from acute **depression**, comprising administering to the individual, once daily, the dosage form of claim 36.

L11 ANSWER 3 OF 11 USPATFULL

AB A transdermal composition is disclosed which contains a blend of one or more polymers, one or more drugs, at least one of which has a low molecular weight and is liquid at or about room temperatures. The composition is substantially free of water and liquids which have a normal boiling point (a) optionally below processing temperatures and (b) greater than or equal to the temperature of the low molecular weight drugs. The composition does not suffer from the substantial loss of the lower molecular weight drug during production of the transdermal system. A transdermal composition is also disclosed which has one or more drugs, at least one of which has a low molecular weight and is liquid at or about room temperatures, and a polymer matrix including one or more high shear resistant polymers. The high shear resistant polymer(s) reduce the plasticizing effect of the low molecular weight drug, and has sufficient tack and shear for application to a human being.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:202218 USPATFULL

TITLE: Transdermal compositions containing low molecular weight drugs which are liquid at room temperatures



09/992,235

INVENTOR(S): Mantelle, Juan, Miami, FL, United States  
Houze, David, Coconut Grove, FL, United States  
PATENT ASSIGNEE(S): Noven Pharmaceuticals, Inc., Miami, FL, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6316022	B1	20011113
APPLICATION INFO.:	US 1995-578308		19951226 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1995-472759, filed on 7 Jun 1995, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Dodson, Shelley A.		
LEGAL REPRESENTATIVE:	Foley & Lardner		
NUMBER OF CLAIMS:	26		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)		
LINE COUNT:	968		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . or other animals is well known in the art. For example, WO 91/185592 describes the use of selegiline for treating **Parkinson**'s disease and increasing the life-expectancy of human beings. U.S. Pat. No. 5,192,808 describes the use of selegiline in the treatment. . .

SUMM . . . European patent application 509,761 and PCT WO 89/09051 describe the use of transdermal compositions containing selegiline for the treatment of **Parkinson's** disease. WO 92/21333 describes the use of a transdermal composition containing selegiline for treating withdrawal symptoms and reducing the craving. . . no. 473,252 and Canadian patent application no. 2,022,552 describe the use of selegiline in transdermal compositions for the treatment of **Parkinson's** disease. U.S. Pat. No. 5,242,950 describes the use of a transdermal patch containing selegiline for macular degeneration. U.S. Pat. No. 4,868,218 describes the transdermal application of selegiline in the treatment of **depression**. Nicotine and nitroglycerine are drugs, normally liquid at or about room temperatures, for which there is considerable art on transdermal. . .

DETD Preferred drugs include selegiline, nitroglycerin, nicotine, ciclopiroxolamine, tolbuterol, propanolol, bupranolol, arecolin, methamphetamin, ethosuximide, melproic acid, prilocaine, dyclonine, valproic acid and **amphetaminil**. An especially preferred drug is selegiline. Mixtures of more than one drug can also be used according to the present. . .

CLM What is claimed is:  
. . . drugs comprise selegiline, nitroglycerin, nicotine, ciclopiroxolamine, tolbuterol, propanolol, bupranolol, arecolin, methamphetamin, ethosuximide, melproic acid, prilocaine, dyclonine, valproic acid and **amphetaminil**.

L11 ANSWER 4 OF 11 USPATFULL

AB Novel pharmaceutical dosage forms provide for pulsatile delivery of d-threo-methylphenidate and a second CNS stimulant, i.e., release encapsulated drug in spaced apart "pulses." The second CNS stimulant may be an analeptic agent or a psychostimulant, with analeptic agents preferred. The dosage forms may comprise capsules housing compressed tablets or drug-containing beads or particles, or may comprise a tablet with the first, second and optionally third dosage units each

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representing an integral and discrete segment thereof. Methods of treatment using the pharmaceutical dosage forms are provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:55482 USPATFULL  
 TITLE: Pharmaceutical dosage form for pulsatile delivery of d-threo-methylphenidate and a second CNS stimulant  
 INVENTOR(S): Midha, Kamal K., Hamilton, Bermuda  
 Teicher, Martin H., Waltham, MA, United States  
 PATENT ASSIGNEE(S): Pharmaquest Ltd., Hamilton, Bermuda (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US <u>6217904</u>	B1	20010417
APPLICATION INFO.:	US 2000-544382		20000406 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-127984	19990406 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Page, Thurman K.	
ASSISTANT EXAMINER:	Bennett, Rachel M	
LEGAL REPRESENTATIVE:	Reed, Dianne E. Reed & Associates	
NUMBER OF CLAIMS:	38	
EXEMPLARY CLAIM:	1	
LINE COUNT:	906	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . acid methyl ester (available commercially as Ritalin.RTM.), is a central nervous system stimulant that is used in the treatment of **Attention Deficit Disorder** ("ADD"), a commonly diagnosed nervous system illness in children that is characterized by both distractability and impulsivity. Methylphenidate HCl is also used to treat a related **disorder**, **Attention Deficit Hyperactivity Disorder** ("ADHD"), in which symptoms of hyperactivity are present along with the symptoms of ADD. The drug is additionally used in the symptomatic treatment of **narcolepsy**, **depression**, and the cognitive decline associated with Acquired Immunodeficiency Syndrome ("AIDS") or AIDS-related conditions, as well as for mood elevation, particularly.

SUMM . . . d-threo enantiomer of methylphenidate, rather than the l-threo enantiomer, is primarily responsible for the therapeutic effectiveness of methylphenidate, particularly in **ADHD**. See Srinivas et al. (1992), "Enantioselective Pharmacokinetics and Pharmacodynamics of d,l-threo-Methylphenidate in Children with **Attention Deficit Hyperactivity Disorder**," Clin. Pharmacol. Ther. 52:561-568, who compared the results of administering dl-threo, d-threo, and l-threo methylphenidate to children suffering from **ADHD**, and determined that the pharmacodynamic activity of methylphenidate resides in the d-threo isomer. Ding et al. (1997), "Chiral Drugs: Comparison. . .

SUMM . . . to a second central nervous system ("CNS") stimulant (e.g., an analeptic agent such as d-amphetamine, as found in the commercial **ADHD** product Adderol.RTM.). It has now been discovered that co-administering methylphenidate, and particularly d-threo methylphenidate, with a second CNS stimulant, particularly.

SUMM . . . and d-amphetamine phosphate, amphetamine and d-amphetamine sulfate, amphetamine and d-amphetamine hydrochloride, amphetamine and d-amphetamine saccharate, and amphetamine and d-amphetamine aspartate, **amphetaminil**, bemegride, benzphetamine, benzphetamine hydrochloride, brucine, chlorphentermine, clofenciclan, clortermine, deanol acetamidobenzoate, demanyl phosphate, dexoxadrol, diethpropion, doxapram hydrochloride, N-ethylamphetamine, ethamivan, etifelmin, etryptamine, . . .

SUMM . . . any disorder, condition or disease for which methylphenidate is generally indicated. Such disorders, conditions and diseases include, for example, ADD, **ADHD**, **narcolepsy**, and acute **depression**; methylphenidate may also be used in the treatment of individuals suffering from cognitive decline associated with AIDS or AIDS-related conditions, . . .

CLM What is claimed is:

. . . 16. The dosage form of claim 1, wherein the CNS stimulant is selected from the group consisting of amphetamine, d-amphetamine, **amphetaminil**, bemegride, benzphetamine, benzphetamine, brucine, chlorphentermine, clofenciclan, clortermine, deanol acetamidobenzoate, demanyl, dexoxadrol, diethpropion, doxapram, N-ethylamphetamine, ethamivan, etifelmin, etryptamine, fencamfamine, fenethylline, fenosolone, . . .

34. A method for treating an individual suffering from **ADHD**, comprising administering to the individual, once daily, the dosage form of claim 1.

35. A method for treating an individual suffering from **narcolepsy**, comprising administering to the individual, once daily, the dosage form of claim 1.

36. A method for treating an individual suffering from acute **depression**, comprising administering to the individual, once daily, the dosage form of claim 1.

L11 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2002 ACS

AB Novel pharmaceutical dosage forms provide for pulsatile delivery of d-threo-methylphenidate (I) and a second CNS stimulant, i.e., release encapsulated drug in spaced apart "pulses". The second CNS stimulant may be an analeptic agent or a psychostimulant, with analeptic agents preferred. The dosage forms may comprise capsules housing compressed tablets or drug-contg. beads or particles, or may comprise a tablet with the first, second and optionally third dosage units each representing an integral and discrete segment thereof. Methods of treatment using the pharmaceutical dosage forms are provided as well. A pulsatile release dosage for for administration of I and d-amphetamine is prepd. by formulating 3 individual compressed tablets, each having a different release profile, followed by encapsulating the 3 tablets into a gelatin capsule and then closing and sealing the capsule.

ACCESSION NUMBER: 2000:725442 CAPLUS  
DOCUMENT NUMBER: 133:301177  
TITLE: Pharmaceutical dosage form for pulsatile delivery of d-threo-methylphenidate and a second CNS stimulant  
INVENTOR(S): Midha, Kamal K.; Teicher, Martin  
PATENT ASSIGNEE(S): Pharmaquest Ltd., Bermuda  
SOURCE: PCT Int. Appl., 27 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent

09/992,235

LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000059481	A1	20001012	WO 2000-US9472	20000406
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6217904	B1	20010417	US 2000-544382	20000406
US 6340476	B1	20020122	US 2000-544732	20000406
PRIORITY APPLN. INFO.:			US 1999-127984P	P 19990406
REFERENCE COUNT: 2			THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT	

IT Mental disorder

(attention deficit disorder;

pharmaceutical dosage form for pulsatile delivery of d-threo-methylphenidate and a second CNS stimulant)

IT 51-64-9 54-95-5, Pentylenetetrazole 57-11-4, Stearic acid, biological studies 59-26-7, Nikethamide 63-42-3, Lactose 64-65-3, Bemegride 69-65-8, D-Mannitol 90-81-3, Racephedrine 90-84-6, Diethpropion 122-09-8, Phentermine 124-87-8, Picrotoxin 134-49-6, Phenmetrazine 156-08-1, Benzphetamine 300-62-9, Amphetamine 304-84-7, Ethamivan 309-29-5, Doxapram 333-36-8, Flurothyl 341-00-4, Etifelmin 357-57-3, Brucine 457-87-4, N-Ethylamphetamine 458-24-2, Fenfluramine 461-78-9, Chlorphentermine 467-60-7, Pipradrol 493-92-5, Prolintane 537-46-2, Methamphetamine 557-04-0, Magnesium stearate 634-03-7, Phendimetrazine 1200-47-1, Amphetamine phosphate 1209-98-9, Fencamfamine 1227-61-8, Mefexamide 1344-28-1, Alumina, biological studies 1462-73-3 1592-23-0, Calcium stearate 2152-34-3, Pemoline 2235-90-7, Etryptamine 2706-50-5, Amphetamine hydrochloride 3563-49-3, Pyrovalerone 3635-74-3, Deanol acetamidobenzoate 3736-08-1, Fenethylline 4741-41-7, Dexoxadrol 5632-52-0, Clofenciclan 6909-62-2, Demanyl phosphate 7491-42-1, Hexacyclonate 7528-00-9 7631-86-9, Silica, biological studies 7778-18-9, Calcium sulfate 7789-77-7, Dicalcium phosphate dihydrate 9004-34-6, Cellulose, biological studies 9005-25-8, Starch, biological studies 9063-38-1, Sodium starch glycolate 10389-73-8, Clortermine 13463-67-7, Titania, biological studies 14807-96-6, Talc, biological studies 15302-16-6, Fenozolone 17590-01-1, Amphetaminil 18641-57-1, Glyceryl behenate 22232-71-9, Mazindol 25322-68-3, Peg 25333-81-7, Amphetamine aspartate 28587-71-5, Homocamfin 300666-46-0 300666-47-1 300666-48-2

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(pharmaceutical dosage form for pulsatile delivery of d-threo-methylphenidate and a second CNS stimulant)

L11 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2002 ACS

AB Novel pharmaceutical dosage forms provide for pulsatile delivery of methylphenidate, i.e., release encapsulated drug in spaced apart "pulses".

The dosage forms are comprised of first, second and optionally third dosage units, with each dosage unit having a different drug release profile. The dosage forms may comprise capsules housing compressed tablets or drug-contg. beads or particles, or may comprise a single tablet with the first, second and optionally third dosage units each representing an integral and discrete segment thereof. Methods of treatment using the pharmaceutical dosage forms are provided as well. A pulsatile release dosage form for administration of dl-threo-methylphenidate is prep'd. by formulating 3 individual compressed tablets, each having a different release profile, followed by encapsulating the 3 tablets into a gelatin capsule and then closing and sealing the capsule.

ACCESSION NUMBER: 2000:725440 CAPLUS  
 DOCUMENT NUMBER: 133:301175  
 TITLE: Pharmaceutical dosage form for pulsatile delivery of methylphenidate  
 INVENTOR(S): Midha, Kamal K.; Iorio, Theodore L.; Chungi, Shubha  
 PATENT ASSIGNEE(S): Pharmaquest Ltd., Bermuda  
 SOURCE: PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000059479	A1	20001012	WO 2000-US9359	20000406
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6217904	B1	20010417	US 2000-544382	20000406
EP 1165054	A1	20020102	EP 2000-923181	20000406
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6340476	B1	20020122	US 2000-544732	20000406
PRIORITY APPLN. INFO.:			US 1999-127984P	P 19990406
			WO 2000-US9359	W 20000406
REFERENCE COUNT:	3	THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

IT Mental disorder

(attention deficit disorder; pulsatile  
 release pharmaceuticals for delivery of methylphenidate)

IT 51-63-8 51-64-9 54-95-5, Pentylenetetrazole 57-11-4, Stearic acid,  
 biological studies 59-26-7, Niketamide 60-13-9, Amphetamine sulfate  
 63-42-3, Lactose 64-65-3, Bemegride 69-65-8, D-Mannitol 90-81-3,  
 Racephedrine 90-84-6, Diethpropion 122-09-8, Phentermine 124-87-8,  
 PicROTOXIN 134-49-6, Phenmetrazine 156-08-1, Benzphetamine 300-62-9,  
 Amphetamine 304-84-7, Ethamivan 309-29-5, Doxapram 333-36-8,  
 Flurothyl 341-00-4, Etifelmin 357-57-3, Brucine 457-87-4,  
 N-Ethylamphetamine 458-24-2, Fenfluramine 461-78-9, Chlorphentermine  
 467-60-7, Pipradrol 493-92-5, Prolintane 537-46-2, Methamphetamine  
 557-04-0, Magnesium stearate 634-03-7, Phendimetrazine 1200-47-1,

Amphetamine phosphate 1209-98-9, Fencamfamine 1227-61-8, Mefexamide 1344-28-1, Alumina, biological studies 1462-73-3 1592-23-0, Calcium stearate 2152-34-3, Pemoline 2235-90-7, Etryptamine 2706-50-5, Amphetamine hydrochloride 3563-49-3, Pyrovalerone 3635-74-3, Deanol acetamidobenzoate 3736-08-1, Fenethylline 4741-41-7, Dexoxadrol 5632-52-0, Clofenciclan 6909-62-2, Demanyl phosphate 7491-42-1, Hexacyclonate 7528-00-9 7631-86-9, Silica, biological studies 7778-18-9, Calcium sulfate 7789-77-7, Dicalcium phosphate dihydrate 9004-34-6, Cellulose, biological studies 9005-25-8, Starch, biological studies 9063-38-1, Sodium starch glycolate 10389-73-8, Clortermine 13463-67-7, Titania, biological studies 14807-96-6, Talc, biological studies 15302-16-6, Fenozolone 17590-01-1, **Amphetaminil** 18641-57-1, Glyceryl behenate 22232-71-9, Mazindol 25322-68-3, Peg 25333-81-7, Amphetamine aspartate 28587-71-5, Homocamfin 300666-46-0 300666-47-1 300666-48-2

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pulsatile release pharmaceuticals for delivery of methylphenidate)

L11 ANSWER 7 OF 11 USPATFULL

AB A method for controlling tobacco use and alleviating withdrawal symptoms due to the cessation of tobacco use comprising administering to a human desiring to control tobacco use and/or suffering from withdrawal due to cessation of such use an effective amount of an acetylcholine esterase reactivator or prodrug derivative thereof optionally in association with an acetylcholine receptor antagonist.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:174658 USPATFULL

TITLE: Method for controlling tobacco use and alleviating withdrawal symptoms due to cessation of tobacco use

INVENTOR(S): Viner, Norman, Ottawa, Canada

PATENT ASSIGNEE(S): Synapse Pharmaceuticals International, Inc., Ottawa, Canada (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6166032		20001226
APPLICATION INFO.:	US 1997-797251		19970207 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Criares, Theodore J.		
NUMBER OF CLAIMS:	32		
EXEMPLARY CLAIM:	1		
LINE COUNT:	611		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . administered in lieu of or in addition to nicotine. Such alternative stimulants include but are not limited to mineptine, Amphetimine, **Amphetaminil**, Bemegride, Benzphetamine, Brucine, Chorphentermine, Clofenciclan, Clortermine, Cocoa, Demanyl Phosphate, Dexoxadrol, Dextroamphetamine Sulfate (Dexedrine), Diethpropion, N-Ethylamphetamine, Ethamivan, Etifelmin, Etryptamine, Fencamfamine, Fenethylline, . . .

DETD . . . He had a 25 pack year smoking history and continued to smoke 12 cigarettes/day. This person also suffered from Wolf **Parkinson** White syndrome complicated by frequent irregular rapid heart rate and intermittent atrial fibrillation. He also suffered from a chronic myofascial. . .

## L11 ANSWER 8 OF 11 USPATFULL

AB The invention relates to a preparation for the application of agents in the form of minuscule droplets of fluid, in particular provided with membrane-like structures consisting of one or several layers of amphiphilic molecules, or an amphiphilic carrier substance, in particular for transporting the agent into and through natural barriers such as skin and similar materials. The preparation contains a concentration of edge active substances which amounts to up to 99 mol-% of the agent concentration which is required for the induction of droplet solubilization. Such preparations are suitable, for example, for the non-invasive applications of antidiabetics, in particular of insulin. The invention, moreover, relates to the methods for the preparation of such formulations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:174129 USPATFULL

TITLE: Preparation for the application of agents in mini-droplets

INVENTOR(S): Cevc, Gregor, Heimstetten, Germany, Federal Republic of

PATENT ASSIGNEE(S): Idea AG, Munich, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6165500		20001226
APPLICATION INFO.:	US 1992-844664		19920408 (7)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1990-4026834	19900824
	DE 1990-4026833	19900824
	DE 1991-4107153	19910306
	WO 1991-EP1596	19910822
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Kishore, Gollamudi S.	
LEGAL REPRESENTATIVE:	Davidson, Davidson & Kappel, LLC	
NUMBER OF CLAIMS:	35	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	31 Drawing Figure(s); 21 Drawing Page(s)	
LINE COUNT:	4336	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD at least one substance which is active against morbus **parkinson**, such as amantadine, benserazide, benztropine, biperidene, cycrimine, levodopa, metixene, orphenadrine, phenglutarimide, pridinol, procyclidine, profenamine or trihexyphenidyl;

DETD at least one substance with a psychostimulating action; well suited for this purpose are, for example, **amphetaminil**, fencamfamine, fenetylline, meclofenoxate, methamphetamine, methylphenidate, pemoline, phendimetrazine, phenmetrazine, prolintane or viloxazine;

CLM What is claimed is:

. . . an anticonvulsant, an anticholinergic, an enzyme, a coenzyme, an enzyme inhibitor, an antihistaminic, an antihypertonic, an anticoagulant, an antimycotic, an anti-**parkinson** agent, an antiphlogistic, an antipyretic, an antirheumatic, an antiseptic, a respiratory agent, a chemotherapeutic, a coronary dilator, an antineoplastic, a. . .

## L11 ANSWER 9 OF 11 USPATFULL

AB Compositions for topical application comprising a therapeutically effective amount of a pharmaceutical agent(s), a pharmaceutically acceptable bioadhesive carrier, a solvent for the pharmaceutical agent(s) in the carrier and a clay, and methods of administering the pharmaceutical agents to a mammal are disclosed.

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:17360 USPATFULL  
 TITLE: Compositions and methods for topical administration of pharmaceutically active agents  
 INVENTOR(S): Kanios, David P., Miami, FL, United States  
 Gentile, Joseph A., Plantation, FL, United States  
 Mantelle, Juan A., Miami, FL, United States  
 Sablotsky, Steven, Miami, FL, United States  
 PATENT ASSIGNEE(S): Noven Pharmaceuticals, Inc., Miami, FL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5719197		19980217
APPLICATION INFO.:	US 1995-477361		19950607 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-112330, filed on 27 Aug 1993, now patented, Pat. No. US 5446070 which is a continuation-in-part of Ser. No. US 1991-813196, filed on 23 Dec 1991, now patented, Pat. No. US 5234957 which is a continuation-in-part of Ser. No. US 1991-661827, filed on 27 Feb 1991, now abandoned, said Ser. No. US 1995-477361, filed on 7 Jun 1995 which is a continuation-in-part of Ser. No. US 1993-67001, filed on 26 May 1993 which is a continuation of Ser. No. US 1991-671709, filed on 2 Apr 1991, now patented, Pat. No. US 5300291 which is a continuation-in-part of Ser. No. US 1989-295847, filed on 11 Jan 1989, now patented, Pat. No. US 4994267 which is a continuation-in-part of Ser. No. US 1988-164482, filed on 4 Mar 1988, now patented, Pat. No. US 4814168		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Azpuru, Carlos A.		
LEGAL REPRESENTATIVE:	Foley & Lardner		
NUMBER OF CLAIMS:	27		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1799		

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD CNS STIMULANT/AGENT such as Amineptine, Amphetimine, **Amphetaminil**, Bemegride, Benzphetamine, Brucine, Caffeine, Chlorphentermine, Clofenciclan, Clortermine, Coca, Demanyl Phosphate, Dexoxadrol, Dextroamphetamine Sulfate, Diethylpropion, N-Ethylamphetamine, Ethamivan, Etifelmin, Etryptamine, Fencamfamine, Fenethylline, . . .

CLM What is claimed is:

. . . coronary vasodilators, vasoconstrictors, beta blocking and antiarrhythmic drugs, calcium antagonistic and other circulatory anticonvulsants, anti-vertigo-tranquillizing drugs, antipsychotic drugs, muscle-reactants drugs, anti-Parkinson drugs, non-steroidal hormones, anti-hormones, vitamins, anti-tumor, enzymes, herb medicines



or crude extracts, miotics, cholinergic agonists, antimuscarinic or muscarinic cholinergic blocking. . .

L11 ANSWER 10 OF 11 USPATFULL

AB The invention relates to a patch for transdermal administration of volatile pharmaceutically active ingredients of chemically basic nature which comprises a multi-element system comprising

(a) a matrix having distributed therein as the drug said volatile active ingredient or a physiologically acceptable salt thereof, the matrix comprising a pressure-sensitive adhesive,

(b) an element of a pressure-sensitive adhesive composition which--where (a) contains a salt--contains basic groups to liberate the free base from its salt,

(c) a backing layer impermeable to the diffusible ingredients of (a) and (b), and

(d) a release liner impermeable to the diffusible ingredients of (a) and (b),

matrix (a) or at least a part of (b), whichever is in contact with release liner (d), having a tack sufficient for affixing the patch to the skin, any part of (b) positioned between matrix (a) and release liner (d) being permeable for the deprenyl or the salt thereof or both. The invention also relates to a process for preparing such patch and to a process for treating a patient suffering from **Parkinson's** or **Alzheimer's** disease with such patch.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 95:96832 USPATFULL

TITLE: Patch for transdermal administration of volatile pharmaceutically active ingredients of chemically basic nature and a process for preparation

INVENTOR(S): Wolter, Karin, Melsbach, Germany, Federal Republic of  
Muller, Walter, Neuwied, Germany, Federal Republic of  
Simon, Gunter, Hillesheim, Germany, Federal Republic of  
Nalbach, Christa, Leutesdorf, Germany, Federal Republic of  
Hoffmann, Hans-Rainer, Neuwied, Germany, Federal Republic of

PATENT ASSIGNEE(S): LTS Lohmann Therapie-Systeme GmbH & Co. KG, Neuwied, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5462746		19951031
APPLICATION INFO.:	US 1994-226236		19940411 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1992-969895, filed on 2 Nov 1992, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Phelan, D. Gabrielle		
LEGAL REPRESENTATIVE:	Sprung Horn Kramer & Woods		
NUMBER OF CLAIMS:	27		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	20 Drawing Figure(s); 5 Drawing Page(s)		

09/992,235

LINE COUNT: 424

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB . . . invention also relates to a process for preparing such patch and to a process for treating a patient suffering from **Parkinson's** or **Alzheimer's** disease with such patch.

SUMM . . . Of these compounds a considerable number is volatile under ambient conditions, e.g. deprenyl, tolbuterol, propanolol, bupranolol, arecolin, verapamil, methamphetamin and **amphetaminil**, and particularly deprenyl (selegiline) which is a well-known compound in the treatment of **Parkinson's** and **Alzheimer's** disease.

SUMM . . . in any desired order. A further object of the invention consists in a process for treating a patient suffering from **Parkinson's** or **Alzheimer's** disease which comprises treating such patient with a patch as defined herein-before.

SUMM Suitable drugs to be processed in the patches of the invention are, for example, tolbuterol, propanolol, arecolin, verapamil, methamphetamin, **amphetaminil** and preferably deprenyl, and other compounds well-known to those skilled in the art.

L11 ANSWER 11 OF 11 USPATFULL

AB Compositions for topical application comprising a therapeutically effective amount of a pharmaceutical agent(s), a pharmaceutically acceptable carrier, and a solvent for the pharmaceutical agent(s) in the carrier and methods of administering the pharmaceutical agents to a mammal are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 95:78209 USPATFULL

TITLE: Compositions and methods for topical administration of pharmaceutically active agents

INVENTOR(S): Mantelle, Juan A., Miami, FL, United States

PATENT ASSIGNEE(S): Novor Pharmaceuticals, Inc., Miami, FL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5446070		19950829
APPLICATION INFO.:	US 1993-112330		19930827 (8)
DISCLAIMER DATE:	20100810		
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1991-813196, filed on 23 Dec 1991, now patented, Pat. No. US 5234957 which is a continuation-in-part of Ser. No. US 1991-661827, filed on 27 Feb 1991, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Page, Thurman K.		
ASSISTANT EXAMINER:	Azpuru, Carlos		
LEGAL REPRESENTATIVE:	Foley & Lardner		
NUMBER OF CLAIMS:	45		
EXEMPLARY CLAIM:	1		
LINE COUNT:	2434		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD CHOLINESTERASE REACTIVATOR such as Obidoximine, Pralidoxime CNS STIMULANT/AGENT such as Amineptine, Amphetimine, **Amphetaminil**, Bemegride, Benzphetamine, Brucine, Caffeine, Chlorphentermine, Clofenciclan, Clortermine, Coca, Demanyl Phosphate, Dexoadrol, Dextroamphetamine Sulfate, Diethylpropion, N-Ethylamphetamine, Ethamivan, Etifelmin, Etryptamine, Fencamfamine, Fenethylline, . . .

09/992,235

CLM    What is claimed is:

. . . coronary vasodilators, vasoconstrictors, beta blocking and antiarrhythmic drugs, calcium antagonistic and other circulatory anticonvulsants, anti-vertigo-tranquilizing drugs, antipsychotic drugs, muscle-reactants drugs, anti-Parkinson drugs, non-steroidal hormones, anti-hormones, vitamins, antitumor, enzymes, herb medicines or crude extracts, miotics, cholinergic agonists, antimuscarinic or muscarinic cholinergic blocking. . .

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